

NEW 430 BALL VALVE SERIES

NEW PLATFORM OF COMPACT, DURABLE VALVES PROVIDE SUPERIOR PERFORMANCE



DirectoValve

A Subsidiary of  **Spraying Systems Co.**

TeeJet[®]
TECHNOLOGIES



THE PERFORMANCE ADVANTAGES OF 430 BALL VALVE MANIFOLDS

- Configurable for your operation – choose 2-Way, 3-Way, or Flow Back functionality with a wide range of boom section counts and many inlet, outlet and electrical connection options
- Install more valves in the existing space and increase control capability; accommodates up to 15 boom sections
- Eliminate the expense and complexity of boom-mounted valves by centralizing all boom valves
- Automatic Boom Section Control (ABSC) compatible – closely correlates actual spray application to ABSC signals and recorded data
- Durable – stainless steel ball and stem, and robust assembly and mounting hardware ensure reliable performance
- Long service life – simple ¼ turn actuation means less mechanical movement and wear and tear
- Great value – excellent performance, long life and 30% less expensive than large valves



430 3-Way
Ball Valve



430 2-Way
Ball Valve



430 Flow Back
Ball Valve

430 Ball Valve Series

Three Types to Suit All Types of Sprayers and Spray Operations

430 Ball Valves are available in three styles. Each style has many features and specifications in common. However, the design of each style differs and provides distinct advantages:

- 430 2-Way Ball Valves provide simple, dependable on/off control
- 430 3-Way Ball Valves maintain consistent spraying pressure even when individual sections are switched on and off. Chemicals are always applied consistently during spraying and over- and under-application problems are eliminated
- 430 Flow Back Ball Valves offer instant shut-off at nozzles, eliminating application problems resulting from nozzles continuing to spray after the section has been switched off

430 BALL VALVE SERIES PERFORMANCE OVERVIEW

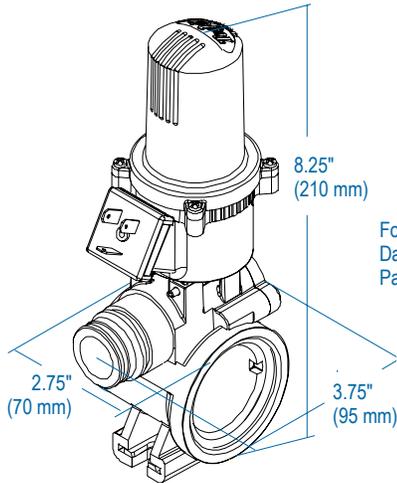


	430 2-Way Ball Valve	430 3-Way Ball Valve	430 Flow Back Ball Valve
Reliable on/off control	✓	✓	✓
Instant shut-off at spray tips			✓
Maintains constant system pressure with diaphragm or piston pumps		✓	
Special feature	Standard on/off control	Pump side of valve; solution directed to tank or boom	Boom side of valve; solution returned to tank
Quick response, low amperage	✓	✓	✓
Extensive rate controller compatibility	✓	✓	✓
Automatic boom section control compatibility	✓	✓	✓
Easy installation	✓	✓	✓
Applications	Simple, small- and medium-size sprayers	Sophisticated sprayers with positive displacement pumps and sprayers with many sections	Wide range of sprayers with moderate per section flow requirements

430 2-Way Ball Valves

Economical, Reliable On/Off Control

- Durable – all metal gears provide long wear life; stainless steel stem and ball resist corrosion
- Economical – reliable performance at a reasonable cost
- Flow rate –11.7 gpm (44 l/min) @ 5 psi (.34 bar) pressure drop; 16.5 gpm (63 l/min) @ 10 psi (.69 bar) pressure drop



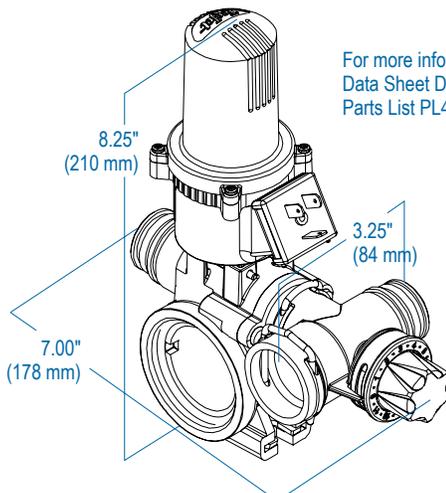
For more information request:
Data Sheet DS430EC-2 and
Parts List PL430EC-2



430 3-Way Ball Valves

Maintains Consistent Spraying Pressure
When Sections Switch On and Off

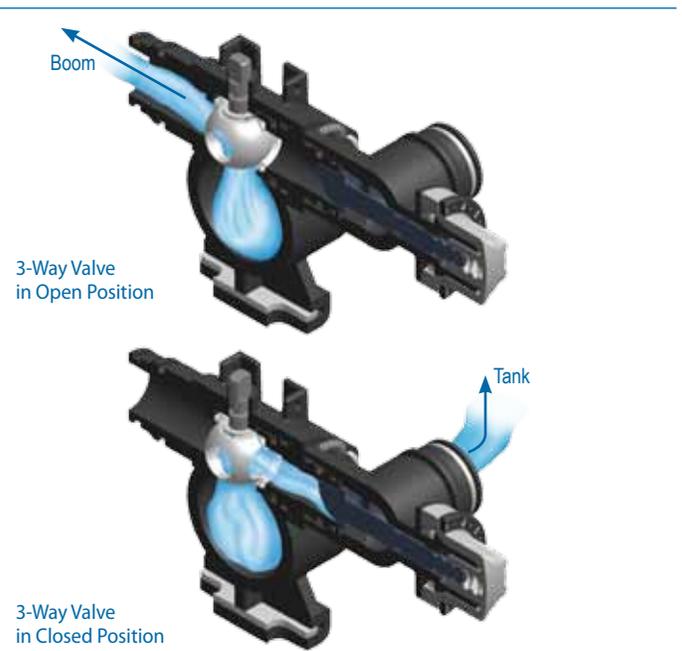
- Minimizes the risk of over- or under-application. Excellent pressure stability when boom sections are switched on or off
- Utilizes adjustable bypass dial to match section flow to bypass flow
- Used with positive displacement pumps (diaphragm pumps or piston pumps)
- Flow rate –11.7 gpm (44 l/min) @ 5 psi (.34 bar) pressure drop; 16.5 gpm (63 l/min) @ 10 psi (.69 bar) pressure drop



For more information request:
Data Sheet DS430EC-3 and
Parts List PL430EC-3



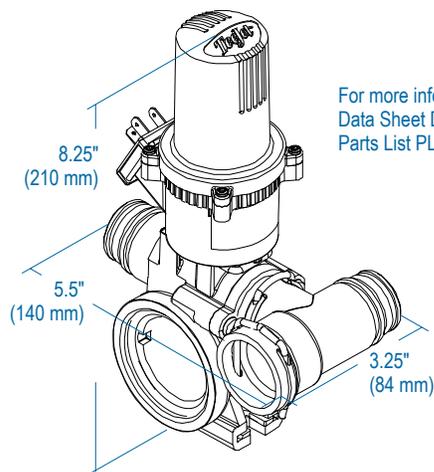
HOW 430 3-WAY BALL VALVES WORK



430 Flow Back Ball Valves

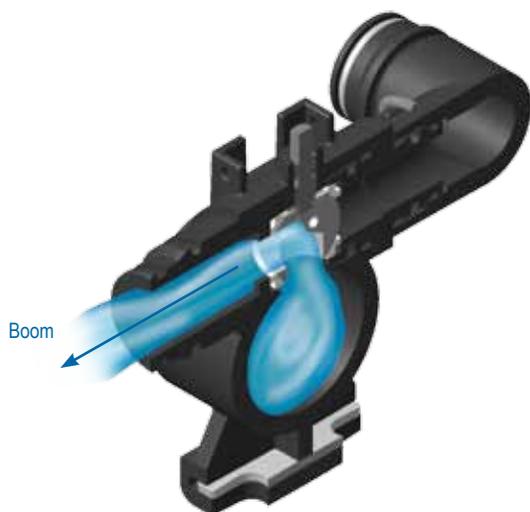
Patented Design Stops Flow to Tips Instantly,
Eliminates Chemical Waste

- Minimizes risk of over- or mis-application and enables spraying to row ends. Boom pressure is relieved when valve is in the off position and results in instant spray tip shut-off. A minimal amount of liquid is diverted back to the tank to relieve the pressure. Spraying stops 80 to 95% faster when Flow Back valves are used
- Spraying resumes instantly. The boom remains full of spray solution and ready to spray when turned on
- Perfect companion to Automatic Boom Section Control (ABSC). Flow Back system optimizes ABSC function by linking controller and spray tip interaction
- Reduces chemical expense by eliminating waste and protects waterways and other areas outside intended boundaries
- Flow rate: 9.2 gpm (35 l/min) @ 5 psi (.34 bar) pressure drop;
13.7 gpm (53 l/min) @ 10 psi (.69 bar) pressure drop

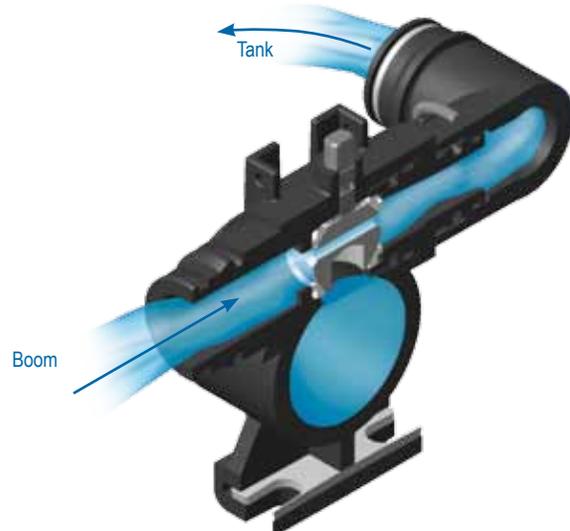


For more information request:
Data Sheet DS430EC-3FB and
Parts List PL430EC-3FB

HOW 430 FLOW BACK VALVES WORK



Flow Back Valve in Open Position



Flow Back Valve in Closed Position

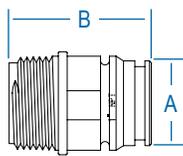
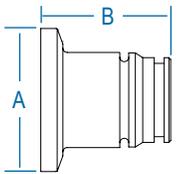
430 SERIES BALL VALVE SPECIFICATIONS SUMMARY

- Maximum pressure: 215 psi (15 bar)
- Flow rate for 2-Way and 3-Way valves:
11.7 gpm (44 l/min) @ 5 psi (.34 bar) pressure drop
16.5 gpm (63 l/min) @ 10 psi (.69 bar) pressure drop
- Flow rate for Flow Back valves:
Flow rate: 9.2 gpm (35 l/min) @ 5 psi (.34 bar) pressure drop;
13.7 gpm (53 l/min) @ 10 psi (.69 bar) pressure drop
- Current draw: < 0.5 AMP @12 VDC
- Response time: 0.6 seconds
- Wetted materials: Polypropylene, stainless steel, VITON®, PTFE
- Motor: EC – single pole, single throw switch;
E – double pole, double throw switch
- Motor assembly IP67
- Resettable internal fuse – disconnect power for 20 seconds to reset
- Built-in mini-DIN connector
- Compatible with TeeJet® Quick-Connect fittings on Flow Back and bypass ports
- Outlet connections: 90° or straight TeeJet Quick-Connect hose barb fittings

QUICK CONNECT FITTING KITS

Description	Series	Part No
1/2" Straight Hose Barb	QC	45529-1/2
3/4" Straight Hose Barb		45529-3/4
1" Straight Hose Barb		45529-1
1/2" 90° Hose Barb		45529-90-1/2
3/4" 90° Hose Barb		45529-90-3/4
1" 90° Hose Barb		45529-90-1
Quick Connect Plug		45529-P
Quick Connect Cap		45529-C

O-ring and clip included.



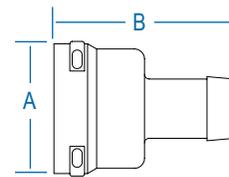
QUICK CONNECTION OUTLET

Description	A	B
Male Quick Connect Flange	2" (51 mm)	1-13/16" (46 mm)
Quick Connect	1-15/16" (49 mm)	2" (51 mm)

QUICK CONNECTION OUTLET*

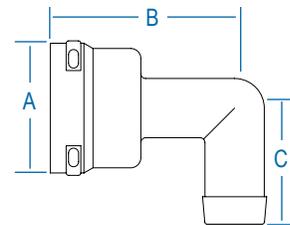
Description	Series	Part No
Male Quick Connect Flange	50	CP46029-PP
Quick Connect	3/4" (M)	CP45527-NYB
Quick Connect	1" (M)	CP45226-NYB

* O-ring and clip not included.



QUICK CONNECT STRAIGHT HOSE BARB

Description	A	B
1/2" Straight Hose Barb	1-11/16" (42.7 mm)	2-1/4" (57 mm)
3/4" Straight Hose Barb		
1" Straight Hose Barb		



90° QUICK CONNECT HOSE BARB

Description	A	B	C
1/2" 90° Hose Barb	1-11/16" (42.7 mm)	2-19/64" (58.4 mm)	1-29/64" (38.6 mm)
3/4" 90° Hose Barb			
1" 90° Hose Barb			

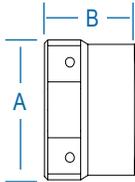
CLIP AND O-RING

Description	Part No
Retaining Clip 302SS	CP37166-1-302SS
O-Ring Vitor®	CP7717-3-912-VI

LARGE QUICK CONNECT FITTINGS

Description	Series	Part No.
3/4" Female Thread	Large Quick Connect	(B)58456-3/4
1" Female Thread		(B)58456-1
1-1/4" Female Thread		(B)58456-1-1/4
1-1/2" Female Thread		(B)58456-1-1/2
Cap Fitting		58456-C
Gauge Port Fitting		(B)58456-1/4
1" Straight Hose Barb		58456-1000
1-1/4" Straight Hose Barb		58456-1250
1-1/2" Straight Hose Barb		58456-1500
2" Straight Hose Barb		58456-2000

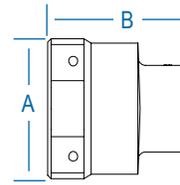
O-ring and clip included.



LARGE QUICK CONNECT CAP FITTING

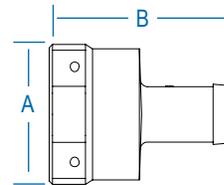
Description	A	B
Cap Fitting	2-1/2" (64 mm)	1-5/8" (41 mm)

For more information request:
 Cable – Data Sheets DS58480 and DS58480X2
 Inlets – Parts List PL58456
 Outlets – Parts List PL45529



LARGE QUICK CONNECT FITTING

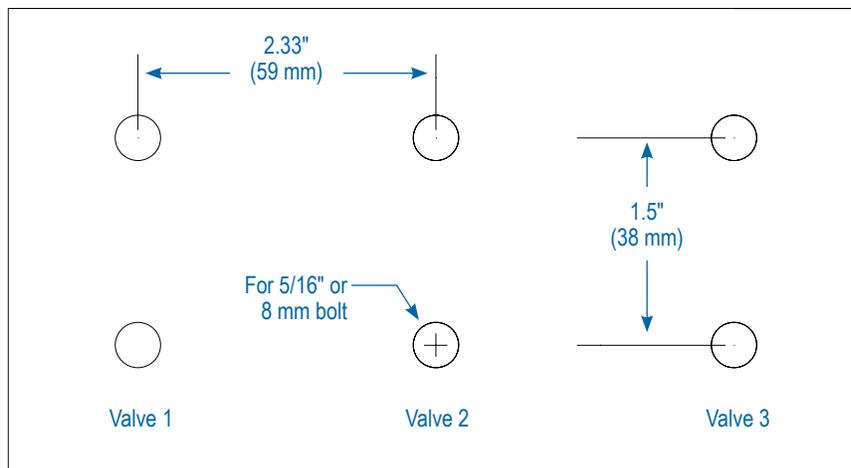
Description	A	B
1/4" Female Thread (Gauge Port)	2-1/2" (64 mm)	2-1/4" (57 mm)
3/4" Female Thread		2-1/2" (64 mm)
1" Female Thread		2-1/2" (64 mm)
1-1/4" Female Thread		2-1/2" (64 mm)
1-1/2" Female Thread		2-1/2" (64 mm)
1-1/2" Female Thread		2-1/2" (64 mm)



LARGE QUICK CONNECT STRAIGHT HOSE BARB FITTING

Description	A	B
1" Straight Hose Barb	2-1/2" (64 mm)	3-1/4" (83 mm)
1-1/4" Straight Hose Barb		3-1/4" (83 mm)
1-1/2" Straight Hose Barb		3-1/2" (89 mm)
2" Straight Hose Barb		4" (102 mm)

BOLT HOLE PATTERN



HOW TO ORDER

SAMPLE VALVE PART NUMBER

437EC-3FB-D

MODEL SPECIFICATION	
PART CODE	DESCRIPTION
43	MANIFOLD

MOTOR SPECIFICATIONS		
PART CODE	SWITCH	DESCRIPTION
E	DPDT	22 RPM, 0.6 SECOND SHUTOFF VALVE
EC	SPST	

MOTOR CABLES	
PART CODE	DESCRIPTION
D	POSITIVELY SWITCHED W/ MINI-DIN CONNECTOR
DN	NEGATIVELY SWITCHED W/ MINI-DIN CONNECTOR

MANIFOLD SIZES	
PART CODE	DESCRIPTION
1	1-VALVE MANIFOLD
3	3-VALVE MANIFOLD
5	5-VALVE MANIFOLD
7	7-VALVE MANIFOLD
9	9-VALVE MANIFOLD

VALVE TYPE	
PART CODE	DESCRIPTION
2	2-WAY VALVE
3FB	FLOW BACK
3	3-WAY VALVE

Other manifold sizes are available.

MINI-DIN CABLE ASSEMBLY PART CODE EXAMPLE

58480EC-15-VX

CABLE WIRE CODE	
PART CODE	DESCRIPTION
E	2 WIRE CABLE
EC	3 WIRE CABLE

For "E" style motors use 2-wire cable.
For "EC" style motors, use 3-wire cable.

CABLE LENGTH CODE	
PART CODE	DESCRIPTION
05	0.5 METER (20")
15	1.5 METER (60")
30	3.0 METER (120")

CONNECTOR AND WIRING CODE	
PART CODE	DESCRIPTION
VX	FIRST NUMBER REFERS TO CONNECTOR CODE, SECOND NUMBER REFERS TO WIRING CODE

For wiring connectors and cables, refer to Data Sheet DS58480X2



VITON is a registered trademark of E.I. DuPont de Nemours and Co.



TeeJet Technologies
North Avenue and Schmale Road, P.O. Box 7900
Wheaton, IL 60187-7901 USA
Tel: (630) 665-5000 • Fax: (630) 665-5292
www.teejet.com